

IN THE CLAIMS:

Please amend the claims as follows:

1. (currently amended) A method in a wireless communication system for determining a location of a <u>target</u> mobile station (MS) <u>having a long-range wireless</u> communication system link within a location server and a short-range wireless link with a <u>plurality of reporting devices</u>, the method comprising the steps of:

obtaining a first location information from the target MS using the wireless communication system link and storing the first location information in a location server of the system;

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and

communicating with the target MS using the short-range wireless link and storing location information corresponding to [[a]] the target MS in a plurality of reporting devices and in a location server of the wireless communication system; and

upon failing to obtain location information from the target MS using the longrange wireless communication system link:

defining a subset of the plurality of reporting devices;

eliciting the location information corresponding to the target MS from the subset;

combining portions of the <u>clicited</u> location information <u>corresponding to the target</u>
<u>MS</u> to determine the location of the target MS.

2. (currently amended) The method of claim 1,

wherein the location of each of the plurality of reporting devices is known to at least one of the reporting device and the location server, and

wherein the defining step comprises the step of defining the subset to include the plurality of reporting devices whose locations are less than a predetermined distance from the target MS, as estimated based upon the <u>first</u> location information.

3. (original) The method of claim 1, wherein the defining step comprises the step of



defining the subset to include all the plurality of reporting devices within range of one of a cell and an area, in which the target MS was last located.

4. (original) The method of claim 1, wherein the defining step comprises the steps of:

defining a time period; and

defining the subset to be all reporting devices which obtained location information corresponding to the target MS during the time period.

- 5. (original) The method of claim 1, wherein the defining step is performed in a portion of the wireless communication system exclusive of the plurality of reporting devices.
- 6. (original) The method of claim 1, wherein the defining step is performed in the plurality of reporting devices according to a set of subset-selection rules.
- (original) The method of claim 1, wherein the eliciting step comprises the steps
 identifying the target MS to the subset; and
 requesting the subset to report the location information corresponding to the target
 MS.
- 8. (original) The method of claim 1,
 wherein the location information includes a time stamp identifying when the target MS was at a reported location, and

wherein the combining step comprises the step of extrapolating a current location of the target MS from a last reported location and time and at least one of another reported location and time, and a reported velocity.



9. (original) The method of claim 1, wherein the obtaining and storing step comprises the steps of:

communicating between a reporting device and the target MS over a short-range link; and storing the location of the reporting device as the location of the target MS.

10. (original) The method of claim 1, further comprising in a reporting device the steps of:

receiving a request to report the location information corresponding to the target

MS; and

attempting to contact the target MS to determine the location of the target MS, in response to receiving the request.

11. (currently amended) A location server in a wireless communication system for determining a location of a mobile station (MS), the location server comprising:

a communication interface;

a processor coupled to the communication interface for controlling the communication interface to communicate, via a long-range wireless communication system link, with a target MS and with a plurality of reporting devices to obtain location information corresponding to the target MS; and

a database coupled to the processor for storing the location information, wherein the processor is programmed to upon failing to obtain location information from the target MS using the long-range wireless communication system link:

define a subset of the plurality of reporting devices;

elicit location information corresponding to the target MS from the subset, the location information being obtained by the subset using a short-range wireless link; and combine portions of the elicited location information corresponding to the target MS to determine the location of the target MS.



12. (original) The location server of claim 11,

wherein the location of each of the plurality of reporting devices is known to at least one of the reporting device and the location server, and

wherein the processor is further programmed to define the subset to include the plurality of reporting devices whose locations are less than a predetermined distance from the target MS, as estimated based upon the location information.

- 13. (original) The location server of claim 11, wherein the processor is further programmed to define the subset to include all the plurality of reporting devices within range of one of a cell and an area, in which the target MS was last located.
- 14. (original) The location server of claim 11, wherein the processor is further programmed to:

identify the target MS to the subset; and request the subset to report the location information corresponding to the target MS.

15. (original) The location server of claim 11,
wherein the location information includes a time stamp identifying when the target MS was at a reported location, and

wherein the processor is further programmed to extrapolate a current location of the target MS from a last reported location and time and at least one of another reported location and time, and a reported velocity.

- 16. (currently amended) A reporting device in a wireless communication system for determining a location of a mobile station (MS), the reporting device comprising:
- a processor for controlling the reporting device, the processor comprising a memory; and



a transceiver coupled to the processor for cooperating with the processor to communicate with a target MS, via a short-range wireless link, for obtaining and storing in a memory location information corresponding to the target MS,

wherein the processor is programmed to cooperate with the transceiver to:

receive, on a long-range wireless communication system link, from a location server of the wireless communication system, when the location service has failed to obtain location information from the target MS using the long-range wireless communication system link, a message eliciting the location information corresponding to the target MS from a subset of a plurality of reporting devices; and

communicate the <u>elicited</u> location information <u>corresponding to the target MS</u> to the location server when the reporting device is a member of the subset.

17. (original) The reporting device of claim 16 further comprising a location determining element coupled to the processor for determining the location of the reporting device,

wherein the processor is further programmed to:

control the transceiver to limit communication range between the reporting device and the target MS to that of a short-range link;

communicate with the target MS; and store the location of the reporting device as the location of the target MS.

18. (original) The reporting device of claim 16, wherein the processor is further programmed to:

receive a request to report the location information corresponding to the target MS; and

attempt to contact the target MS to determine the location of the target MS, in response to receiving the request.





- 19. (original) The reporting device of claim 16, wherein the reporting device is a mobile wireless device similar to the target MS.
- 20. (original) The reporting device of claim 16, wherein the reporting device is a fixed, wired device.